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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/598,687

05/29/2007

Jos Kobussen

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EXAMINER

TOUSSAINT, DALILA

ART UNIT

PAPER NUMBER

1794

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/598,687	Applicant(s) KOBUSSEN ET AL.	
	Examiner DALILA TOUSSAINT	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 14-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-17 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/08/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-13, drawn to a method of at least partially dehydrating the casing of co-extruded food product, classified in class 426, subclass 231.
 - II. Claims 14-17, drawn to a device for at least partially dehydrating the casing of co-extruded food products, classified in class 99, subclass 516.
2. Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process as claimed can be practiced by another and materially different apparatus such as by means of a hot air treatment to heat shrink the casing of co-extruded food product as disclosed in US patent 7357953 (column 2, line 50-60).
3. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:
 - (a) the inventions have acquired a separate status in the art in view of their different classification;

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- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected invention.**

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

4. During a telephone conversation with Timothy J. Zarley on April 22, 2009 a provisional election was made without traverse to prosecute the invention of group I, claims 1-13. Affirmation of this election must be made by applicant in replying to this Office action. Claims 14-17 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

5. Claims 1-13 objected to because of the following informalities: the term --A-- should be added at the beginning of claim 1. For claim 2-13, the term --The-- should be added at the beginning of the sentence. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 6-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claims 6-7 recites the limitation of "an additive" in line 2 of claim. There is insufficient antecedent basis for this limitation in the claim. Also it is unclear to which aqueous salt solution the additive is being added, i.e. the collected aqueous salt solution or reconditioned aqueous salt solution.

9. Regarding claims 8-9, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
12. Claims 1-3 and 5-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobussen et al. US patent 6245369 in view of Ricklefs et al. US patent 5632153, Riordan US patent 4094237, Barber et al. US publication 2003/0183092, and Sanderson et al. US patent 5783237.

- a. Referring to claim 1, Kobussen discloses a method wherein sausage strands are coextruded onto a belt or conveyor and carried through a brine shower system (Kobussen; column 4, line 9-10 and column 3, line 1-4). The brine shower system includes a brine tank which is connected to a brine collection tray (Kobussen; column 4, line 20-23) and "a plurality of the nozzles which spray a quantity of brine on the moving sausage strand (Kobussen; column 4, line 39-41)." The excess brine from the nozzles flows downwardly into the brine collection tray, and thence into the brine tank wherein the excess brine is recirculated through the system (Kobussen; column 4, line 39-41).

Kobussen discloses most of the instant claim, however, is silent to reconditioning the collected brine (aqueous salt solution) prior to recirculating the brine through the system.

Ricklefs discloses a system for cleansing brine in a recirculating chilling system, wherein a reconditioned brine storage tank is in fluid communication with a ultrafiltration unit and the chilling circuit (Ricklefs; column 1, line 64 and column 2, line 22-24).

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Riordan discloses a method of purifying the overflow contaminated brine before recycling it for use in a curing process (Riordan; column 1, line 25-26).

The excess contaminated brine is collected and filtered, subjected to ultra-violet irradiation, mixed with fresh substantially uncontaminated brine, subjected to ultraviolet irradiation again, and finally reused as brine (Riordan; column 1, line 29-38).

Barber discloses a process wherein brine solution is treated with a microbicide, filtered and reused in a brine bath tank (Barber; abstract and ¶ 0031).

Sanderson discloses a process for the recovery and reuse of a salt solution during processing of various foods products such as cheese (column 1; line 5-7). The process therein includes spraying brine onto food conveyed on a belt, wherein the excess is collected into a tank, filtered, evaporated of excess water, cooled, saturated with additional salt, and then reused as a salt solution (Sanderson; example 1).

Regarding the brine shower system of Kobussen, it would have been obvious to one skilled in the art at the time of invention to include reconditioning the brine prior to recirculating as the secondary references to avoid microbiological contamination (Sanderson; column 1, line 24 and Riordan; column 19-23). It has been held to be within the general skill of a worker in the food art to select a brine purifying process on the basis of its suitability for the intended use as a matter of obvious engineering choice. Thus a prima facie case

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of obviousness will be considered to have been established over functional limitations that stem from the claimed structure, wherein the process of reconditioning brine is shown in the prior art and possesses the characteristics of the claimed product.

b. Referring to claim 2, Kobussen is silent to heating the salt solution to evaporate water out. However, Sanderson discloses concentrating the permeate (salt water) from 7.5% to about 13.4% by an evaporator (Sanderson; column 3, line 54-60). It would have been obvious to one of ordinary skill in the art at the time of invention to include the evaporator of Sanderson to decrease the water content of the salt solution (Sanderson; column 2, line 18-20).

c. Referring to claim 3, Kobussen is silent to filtering the collected aqueous salt solution. However, the secondary references as seen in claim 1 above disclose the step of filtering the salt solution after collecting the used salt solution (Sanderson; figure 1 and Riordan; column 2; line 7-10). It would have been obvious to one skilled in the art at the time of invention to include reconditioning the brine prior to recirculating as the secondary references to separate suspended solids from the brine without affecting the salinity of the brine (Ricklefs; column 2, line 19-20).

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d. Referring to claim 6-10, Kobussen is silent to the method wherein an additive, a strong oxidant, is added to the aqueous salt solution. However, Barber discloses a process wherein a brine solution is treated with a microbicide, filtered and then reused in a brine bath tank (Barber; abstract and ¶ 0031). The microbicide is peroxy acetic acid (also known as peracetic acid) (Barber; ¶ 0029), a strong acid oxidizing agent that is always in solution with hydrogen peroxide as referenced by www.wikipedia.org/wiki/Peracetic_acid (cited website; production). It would have been obvious to one of ordinary skill in the art at the time of invention to add a microbicide as Barber to avoid growth of bacteria and other microbes in the brine bath tank (Barber; ¶ 0029). As the disclosed reference uses a strong oxidant additive, it would be reasonably expected that the peroxy acetic acid will have the same characteristics claimed, particularly to prevent/ reverse discoloration of the salt solution.

e. Referring to claim 11-13, Kobussen is silent to the method wherein the aqueous salt solution is irradiated by ultraviolet radiation. However, Riordan discloses a method of purifying the overflow contaminated brine before recycling it for use in a curing process (Riordan; column 1, line 25-26). The excess contaminated brine is collected and filtered, subjected to ultra-violet irradiation, mixed with fresh substantially uncontaminated brine, subjected to ultraviolet irradiation again, and finally reused as brine (Riordan; column 1, line 29-38). It would have been obvious to one skilled in the art at the time of invention to

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include ultra-violet irradiation as Riordan to avoid microbiological contamination (Riordan; column 19-23). As the disclosed reference uses a substantially identical process it would be reasonably expected that the ultra-violet irradiation will have the same characteristics claimed, particularly to prevent/ reverse discoloration of the salt solution.

13. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobussen et al. US patent 6245369 in view of Ricklefs et al. US patent 5632153, Riordan US patent 4094237, Barber et al. US publication 2003/0183092, Sanderson et al. US patent 5783237, Roy "*Activated Carbon Application in the Food and Pharmaceutical Industries*", Garrido et al. "*The Recycling of Table Olive Brine Using Ultrafiltration and Activated Carbon Adsorption*", and <http://tristate.apogee.net/et/ewtwaca.asp>.

f. Referring to claim 4-5, Kobussen is silent to filtering by means of absorption. However, Roy discloses treating storage brines with activated carbon to recondition the brine for use up to six months (Roy; last paragraph). Garrido disclose recycling brines after treatment with activated carbon and ultrafiltration (Garrido; abstract). It would have been obvious to one of ordinary skill in the art at the time of invention to include reconditioning the brine as the secondary references to reduce polluted waste in water streams (Garrido; abstract). Activated carbon is well known in the art as an absorption and adsorption material that is often used in a filter bed itself or mixed with the organic streams

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and removed later by filtration (cited website

<http://tristate.apogee.net/et/ewtwaca.asp>).

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sengupta et al. WIPO publication 2004/087586 discloses removing DOC from a salt solution.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DALILA TOUSSAINT whose telephone number is (571)270-7088. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571)272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. SAYALA/
Primary Examiner, Art Unit 1794

DT